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Financing the Industrial Revolution[1]

Until recently, students of the Industrial Revolution of the 18th and 19th centuries concentrated on technological changes or on labor and social problems but neglected capital and the capitalist. Mantoux gave 160 pages to technology, 100 to labor, and only 34 to capital. Mrs. Knowles devoted 8½ pages out of 392 to capital, companies, and combinations. The Hammonds have given us volumes on the town laborer, the skilled laborer, and the village laborer, but we still lack the book Unwin once hoped they would write on the working life and ideals of the entrepreneur.

Within the last two decades the balance has begun to be redressed. The Manchester School has explored the business records of cotton, coal, and iron firms;[2] the Boulton and Watt MSS. have been combed for information concerning the organization of the great Soho firm;[3] Wedgwood's business history is now known, and the Yorkshire woolen industry has been painted in new colors.[4] Meanwhile the history of joint stock organization has been taken up at the point where Professor Scott dropped it—in 1720, and several writers have explored the "risk factor" to investors, the high proportion of still births, the heavy infantile mortality, and the average expectation of life among the first twenty thousand British

[1] The contents of this paper were presented at a joint meeting of the Business Historical Society and the American Historical Association, at Providence, R. I., Dec. 29, 1936.
[2] E.g., Unwin, G., *Samuel Oldknow and the Arkwrights* (1923); Ashton, T. S., *Iron and Steel in the Industrial Revolution* (1924); Wadsworth, A. P., and Mann, J., *The Cotton Trade and Industrial Lancashire* (1931).
[3] Roll, E., *An Early Experiment in Industrial Organization* (1930)
[4] Crump, W. B., *The Leeds Woollen Industry, 1780-1820* (1931)

companies.[5] It is therefore possible to speak with a modicum of knowledge about (a) those private entrepreneurs who bore the burden of developing most manufactures, as well as much of the mining, metallurgy, shipping, wholesale trade, and retail distribution during the 19th century, and (b) the joint stock companies which provided the canals and railroads, financed the new banks, and stimulated foreign investment.

Since the industrial (as distinct from the transportation) developments of the 18th century and of much of the 19th were carried through by private firms, let us concentrate on them and ask "Where did the money come from? How did it grow or diminish? What was its reward?" Well-informed answers cannot readily be given; too few cases have been studied, and the necessary documents seem to be very scanty. As a contribution to the subject, or as an attempt to make the darkness more visible, I intend to answer these questions for a limited but not unimportant area and industry—the Yorkshire woolen manufacture.

Before seeking the source of the capital, it is worth asking "How much was needed by those who built up enterprises with the new machines and power generators housed in mills or factories?" The erection and equipment of a factory large enough to house *all* the processes necessary to convert raw wool into finished cloth might cost £30,000 to £50,000 for land, buildings, engine or waterwheel, and machinery. But such omnibus enterprises were rare. The textile industry was *the* land of opportunity for the energetic and ambitious man with little capital. "Go textile, young man!" would have been a good bit of Georgian Greeleyesque advice to those whose courage was great but whose purse was light.

Several factors combined to smooth the path for these men. In the first place, they need sink little capital in buildings or equipment. An old flour or fulling mill, or even an old barn, could be adapted to scribbling, slubbing, or spinning. If one must build, a small structure might suffice. Scores of mills were only 50 feet by 27, and two or three storeys high; some were even smaller. The early machines were not expensive when new, and used ones could be obtained quite cheaply as factory discards or at an auction sale of some bankrupt's effects. One could get a "forty-spindle jenny of the best sort" for £6 in 1792; a big scribbling or carding machine could be bought for £50, and in the 1830's a power-loom cost only

[5] See the articles by B. C. Hunt in *J. Pol. Econ.*, Feb. and June, 1935; by D. H. Macgregor, in *Econ. J.*, Dec., 1929; by G. Todd in *Econ. Hist. Rev.*, Oct., 1932; by H. A. Shannon, in *Econ. Hist. Rev.*, Oct., 1933. Also G. H. Evans, *British Corporation Finance, 1775-1850* (1936).

£20, while a power-loom shed could be built and equipped with fifty looms for about £5,000. When fire destroyed a scribbling mill and all its contents in 1821, the total damage was only £1,500; and when an "extensive corn and scribbling mill, with all the valuable machinery and stock" was gutted, the loss was only £5,000.

But the man with little capital need not sink *any* of it in plant. He could rent space—a single room, a floor, or a whole mill; he could buy power from his landlord, and he might be able to rent the machinery as well. In depressed days assignees of bankrupt textile estates were eager to find tenants for part or the whole of the property, and might offer to advance "the necessary sums of money for wages" or even to supply all the needed operating capital. In prosperous days the building of mills for lease to one or more tenants was a profitable way of investing capital. Large landlords were especially active, but merchants, manufacturers, and others who had money to spare turned it into bricks, mortar, and machinery, and then sought tenants among "persons desirous of commencing the woollen or worsted business with a small outlay of capital."

In the second place, a textile enterprise might be what we can call a service station. If the beginner needed to sink little capital in plant, he need not put any (or much) in raw material, since he could find full employment performing one process only on materials belonging to his patrons. Many corn or fulling millers, who ground grain or fulled cloth for their neighbors, installed the new carding and scribbling machines after 1775, and treated wool brought to the mill by local cloth-makers. Dyers and finishers might work on cloths belonging to merchants; worsted combers or spinners might take in wool and send back combings or yarn. The putting out system thus showed remarkable powers of adaptation, with a mill-operator rather than a domestic craftsman as the "puttee." Looked at from another angle, the man who put his capital into raw material need not put any into plant, but could draw on the services of others to carry his wool through the various processes. There was yet a third angle, since the operator of a one-process plant might buy material, carry it through one stage, and then sell it. He might buy sorted wool, comb it and sell "tops" to the spinner, who spun them and sold yarn to the weaving firm, which made it into cloth and sold raw pieces to merchants, who finished them and sold the final product.

In the third place a small factory with a few machines was not at a great disadvantage in competing with a larger rival. The raw material market and the method of selling cloth had for centuries

been organized to cater to the small producer. Some tasks could not be done by machines. Further, apart from plain cottons and low grade or standard woolens, the product was one of great variety of patterns, weights, and qualities, calling for a kindred variety of yarns, spinning and weaving standards, dyeing and finishing methods, as well as for ability to adjust production to rapid changes in fashion. A small firm could concentrate on one style, pattern, or quality, or market, process, or service. Hence, while some factories were born big and others grew big, specialization allowed the small or middle-sized firm to operate efficiently.

It should now be clear that fixed capital requirements need not be large. Yet they were frequently large enough to harass and perplex those who needed funds for building or equipping a plant of their own;[1] for they were often the last straw on a back that already bore a heavy load. That load was the need for large sums of operating capital, or "floating capital" as the bookkeepers called it. The service firm might confine its operating expenses to wages, rent, fuel, and cost of such necessary materials as dyestuffs; but business which brought raw materials, operated plants, and sold semi-manufactured or finished goods usually were both debtor and creditor for sums far beyond the cost of their factories or even their total capital. They carried large stocks of raw materials and of goods in various stages of production. Three to six months might elapse before a bale of wool was converted into cloth, and another six or more months passed before sale and final payment had been effected. The man who consigned goods at his own risk and on his own account to transatlantic markets might have to wait still longer for his cash. Meanwhile wages must be paid when due, payments for services could not be long postponed, and providers of raw material did not grant indefinite credit. Bank loans might help to bridge the gap in time between outgo and income, but the firm must have some working capital of its own and must relate the scale of its operations to the amount of that capital. If it extended beyond a safe limit it sought disaster, for when some big merchant, manufacturer, or banker in Leeds, London, Liverpool, or America became a bad debtor, the overstretched rubber band snapped, with disastrous effects even on those who had tried to play the game as cautiously as was humanly possible.

So much for the demand for capital. Now, what of the supply? The landlords provided some by building mills. The merchants

[1] We know of Wedgwood's frantic call for £3,000 to meet one year's building costs at Etruria, and of the strain on Boulton's resources when he was erecting his Soho factory.

made a more important contribution; they supplied funds to some producer whose goods they were handling, or went into partnership, as in the case of Arkwright, Boulton, and Wedgwood; or they went into the new form of production themselves, as in the case of Benjamin Gott and some of his fellow cloth-merchants in Leeds, or of David Dale and his fellow Glasgow traders. Private bankers helped less. Like their joint stock descendants, they were commercial bankers, not investment houses; but the short term credit they supplied liberated some of the entrepreneur's own funds for long-term use. The crash of more than 300 provincial banks in 1814-1816 and in 1825-1826 decimated or even obliterated local banking facilities, and deprived some areas of their main form of currency—the local banknote. Hence manufacturers and merchants eagerly undertook the establishment of joint stock banks after 1826, subscribed to their capital, and supplied them with Scottish managers. Meanwhile the Bank of England established branches in the leading cities, and the modern banking system gradually took shape.

These external supplies of capital were, however, less important than the personal or family funds which the industrialists scraped together and ventured in the new productive equipment. The power of heredity and the vitality of the family as an economic group stand out whenever we examine the history of the pioneer manufacturers. Josiah Wedgwood was at least the fifth generation of potters; the Midlands ironmasters looked back on an ancestry of nail or lock makers, smelters or founders, brassworkers or ironmongers; and the builder of one of Yorkshire's early large factories was the eleventh generation of clothmakers. In each generation the business conscripted as many members of the family as it needed. Som ran the mill or warehouse, others were sent to New York, Lisbon, or Rio de Janiero, traveled round the British Isles, or slipped over to Germany to sell pieces and buy wool. If the family was cursed with too few sons and too many daughters, the sons-in-law might be drafted. While the firm swallowed everybody in the family, it might also swallow everything—even the latest dowry. Krupp's first cast steel plant absorbed 50,000 thalers taken from the family purse. Boulton sold a lot of the property he inherited, mortgaged most of the rest, and then did the same with the £28,000 worth of property his wife had brought with her. Yet rarely was the amount adequate, and if the family firm eventually survived, it did so after many years of grim abstinence, of pared family budgets, and of frantic efforts to find supplementary funds outside.

Closely related with the family firm was the partnership, which was usually a small group of relatives or friends, though even a stranger might be admitted as a sleeping partner. The biggest partnership groups were those which financed the "company" or "union" mills. These were erected to scribble, card wool or to full cloth, and the capital was provided by the clothiers who used the mill. The number of investors varied between 16 and 56; the shares, usually £25, were saleable, and a shareholder could hold two or more. One of these mills was at work by 1794, but after 1815 the number grew rapidly. Some of these experiments in producers' co-operation were small and unsuccesful, but others were large and flourishing. They never went beyond the two processing services of scribbling and fulling; spinning and weaving were still done in the clothier's home, and the gradual departure of the latter processes to the factory eventually destroyed the *raison d'être* of the company mills.

Few records survive to tell the financial history of the enterprises of a century ago. The last chapter of many of them is a line in the bankruptcy list of the London *Gazette* and a few inches in the newspaper advertisements of auction sales. From these sources one soon concludes that while death and taxes alone were inevitable, bankruptcy was probable. The depressions that followed 1825 and 1836 were ancestors of whom 1929-1933 might well be proud. Long-drawn out—four and six years respectively in duration, they quickly toppled over the heady boomsters and slowly pared away the capital and credit of the conservative. In 1836 there were 318 textile firms in Bradford; ten years later only 127 of them were still alive. The casualty lists contain the names of high and humble, of generals and corporals alike. The bigger the firm the greater the noise when it fell, and the longer the advertisement offering for sale its "delightful villa," its "capital large dwelling house, pleasantly situated, with extensive plantations, pleasure grounds and gardens, trout stream, and picturesque views," and its accumulation of "whatever is usually found in a well-furnished gentleman's house of the first respectability." Failure leaves few other records, and even success is reticent. I have been able to find only two relics that are sufficiently detailed to tell a financial story. Each suffers by starting at a point where the business was well established; but by way of compensation, each covers the period when a large mill was being erected and equipped.

The first records begin in 1825, when William Brooke, merchant manufacturer, 62 years old, and blind as a result of being splashed with hot indigo, hands the management of his yarn-making and

NOTICE.

The
CLOTHING, FULLING, *and*
DYING *Business,*
is carried on at the Works in *Weymouth,*
formerly improved by Mr. RICE. The subscriber (the present Proprietor) employs an experienced workman, and engages that all Cloth sent to be dressed shall be well done, and handsomely finished, with all possible despatch, and at a reasonable price.

Cloths to be dressed will be received at the Works, and at the Store of the subscriber.

COTTON TUFTS, jun.

Weymouth, Oct. 1814.

WM. BURDICK, *printer, Boston*

EARLY ADVERTISEMENT
INDICATING SPECIALIZATION IN THE TEXTILE INDUSTRY

In America, as in Great Britain, the finishing processes were frequently divided and executed by small, independent firms who operated as "service stations" for textile manufacturers. In this instance the firm employed one workman.

cloth-finishing mill near Huddersfield over to his two sons, John and Thomas. The firm is purely a family enterprise, but is organized as a formal partnership, for a fixed length of time and with a fixed initial investment by each partner. The father supplies the buildings, and charges £2,000 a year rent for them; he contributes the machinery and some cash, which combined, amount to £65,000; and on this sum he is to receive five per cent. The two active partner brothers have £18,000 and £9,000 respectively in the business; on these sums they are to receive five per cent, and in addition they are to share the profits on a five to four ratio, which is later changed to fifty-fifty. A third brother, Edward, has £9,000 in the firm; but he has no love for textile work, prefers to be called "squire," and likes to buy shares in the new joint stock banks. Like his father, therefore, he is a sleeping partner; he gets five per cent on his capital, and for six years receives £1,000 annually as a sort of good-bye gift.

The firm thus began operations with about £100,000 of capital stock, on which £5,000 interest must be paid, plus £2,000 for rent and £1,000 gift—£8,000 in all. It was overdrawn £10,000 at two banks, and owed £12,000 for materials. Against this it had book debts of £77,000 for goods sold, £43,000 of cloth in production, wool, and dyestuffs, and £665 in cash. The two young managers set out to modernize, mechanize, and expand the plant, and by 1840 had spent £48,000 on new buildings and equipment. Yet they had been able to wipe out the overdraft and cross off an average of £1,000 of bad debts each year. They were ending each financial year almost entirely free of debt, but with book debts due to them for £40,000 to £80,000 of cloth sold, and with £80,000 to £170,000 worth of cloth in production or in the warehouse, of wool, dyestuffs, and bank balance.

It has often been said that the early industrialists ploughed back their profits into their business. Mr. Keynes said it more eloquently in his *Economic Consequences of the Peace*:—"The capitalist classes were allowed to call the best part of the cake theirs and were theoretically free to consume it, on the tacit underlying condition that they consumed very little of it in practice. The duty of saving became nine-tenths of virtue and the growth of the cake the object of true religion." The Brooke family was in general ten-tenths virtuous, and its accounts show the zeal with which abstinence could be practised when necessary. Any partner could draw out in cash what was due to him as rent, interest, or profit; he could also draw out part or the whole of his capital. If however he left any

part of his annual income in the business, it was added to his capital and earned interest. In the seven years of vigorous plant expansion (1830-1836) the partners were entitled to take out £140,000, but they actually drew only £55,000. They thus left 61 per cent of their income in the firm, and increased their investment from £109,-000 to over £190,000. In one Spartan year (1830) they ploughed back 85 per cent, and in 1931, 88 per cent.

This period of rigorous saving ended when the firm had a good plant and adequate "floating capital." Then it became apparent that the members "had religion" with different degrees of fervour. The father was fairly devout; true, at times he took nearly all his due, and spent it on bank stock, but usually he left it almost untouched, and increased his holding by two-thirds in fifteen years. The squire also lusted after bank shares in all parts of the country; but he managed to let his capital more than double. Thomas the younger son, was no doubter; in eleven years he drew only 17 per cent of what was due, and increased his capital eightfold in fifteen years. But John, the elder brother, was a backslider, who believed in diversified investment or in having a flutter when there was a bull market. In 1835 he drew out all his interest and profit, plus £4,000 of his capital. Two years later he took out so much cash that his capital was reduced from £42,000 to £17,000. A share of his father's holding when the old man died restored his capital to healthy dimensions; but when the railroad boom came in the mid-forties he let family solidarity go with the wind. In 1846 he took £34,000 out of the firm, and thus abstracted all his capital and running £6,000 into debt; by rapid steps this debt rose to £22,000, hovered there for years, and only gradually was reduced to £16,000 in 1859. The total capital of the firm remained nearly stationary, since the other partners continued to leave part of their income untouched. It is probably true that the business could not continue to absorb new capital as easily as it had done in earlier days, and that John's policy of taking out while the others put in was sound. Yet his raids on the cash box must have been disturbing at times, and probably explain why the firm's bank account swung from a large credit balance to an equally large overdraft.

The second set of financial records is more obscure, but it tells much the same story as does the first. In 1785 two veteran Leeds cloth merchants took their ex-apprentice, Benjamin Gott, into partnership for five years. The "neat stock and profits in trade" of the two elders were valued at £36,000, and were divided equally between them. Gott invested one-tenth of this sum (£3,600), and the total

capital was thus nearly £40,000. The firm was purely mercantile; it bought raw cloth, put it out to be finished, and then sold it. But soon the old men died, two sons of one of them entered the firm, and young Gott thus became senior partner at the age of 31 years. He knew nothing about making cloth, but felt it might be profitable to produce certain kinds, and as the firm had some spare capital he began in 1792 to erect a factory which eventually employed a thousand workers. Within ten years over £30,000 had been spent on land, buildings, and machinery, and a second mill had been rented and equipped. The outlay on these two plants strained the firm's finances for a time, but the amount involved was small when compared with that of the "floating capital." The firm ended each year with large debts owed to others, but with far larger debts owed by others; the all-time high was reached in 1816, when the firm was a debtor for £320,000 and creditor for £540,000. The risks in such a situation were great, and in thirty years £150,000 of debts had to be labelled "bad or suspicious," an average of £5,000 a year. The "neat stock and profits in trade" rose from £40,000 in 1785 to nearly £400,000 in 1814; but when peace without prosperity came in 1815 the bad debts rose so much and the plant and goods in hand had to be written down so heavily that the value of the partner's interests fell from £400,000 to £240,000 in two years.

In Gott's firm, as in Brooke's, each partner received interest on his original capital and on any additions he made to it; but he was free to draw all his annual income out and dig into his capital as well. During the factory-building years the visits to the cash box were restrained; but when the years of fixed capital investment were ended, different attitudes became apparent. The younger men built up their holdings; the older man, Benjamin, drew out heavily, to build a mansion, to pay for portraits by Lawrence—the Sargent of the day, to buy railroad stock and consols, or to endow churches, schools, and almshouses. The time had come for him to enjoy a more abundant life.

HERBERT HEATON.

University of Minnesota.

Joint Session on Economic History

Society Meets With American Historical Association

A very successful meeting on Economic History took place in Providence, Rhode Island, on December 29, 1936, held under the joint auspices of the Business Historical Society and the American Historical Association. Mr. James O. Wettereau, Instructor of History at New York University, presented a paper on "New Light on the First Bank of the United States," and Professor Herbert Heaton of the University of Minnesota read one on "Financing the Industrial Revolution." The discussion which followed these contributions was led by Professor Witt Bowden, Bureau of Labor Statistics, Washington, D. C.; Dr. Henrietta M. Larson, Harvard Graduate School of Business Administration, Boston, Massachusetts; and Professor R. W. Hidy, Wheaton College, Norton, Massachusetts. Mr. John Nicholas Brown of Providence presided at the meeting which was attended by more than 200 people.

Prior to the joint session a group of 22 historians and members of the Society took luncheon together informally and held a lively discussion on the subject of business history.

Smith and Scammon: Early Chicago Bankers

All things considered George Smith and J. Young Scammon were the two outstanding bankers in Chicago history from 1836, when the city's first bank (a branch of the State Bank) was opened, to the turn of the century. Both men became actively identified with the life of the pioneer community in their twenties. One was a Scottish banker of extraordinary ability, the other was a public-spirited lawyer with strong leanings toward banking throughout his life. One saw in legal restraints on banking only unfortunate restrictions to a successful banker, the other strove for laws to prescribe bank practice. One concentrated all of his efforts upon finance—purely commercial banking of a high order but with his note issues always extra-legal—and within a quarter of a century had accumulated an enormous fortune and retired to London. The other was in business much longer, but at length, with a wider range of interests and through catastrophes beyond his control, in

the Chicago Fire of 1871 and the panic of two years later, he saw his banking institutions collapse within precisely the legal framework which he had for many years advocated.

In 1837 the firm of Strachan and Scott established the first private banking house in Chicago. In all probability the sponsor of this firm was George Smith who first visited the community in 1834 and then returned to his native land for capital and associates to exploit the resources of a hinterland soon to be tributary to Chicago. Banking at that time was precarious business: the Illinois constitution (1818) provided that there should "be no other banks or monied institutions in this state than those already provided by law except a State Bank and its branches." For a banker to function on any scale at all it was necessary that he put out circulaing notes of some kind, but this was prohibited. Smith saw a clue to the solution of the problem in the charter provisions of the Chicago Marine and Fire Insurance Company which had been incorporated in 1836 at the same time that the State Bank opened its Chicago branch. While the right to issue notes was specifically denied the Company, it was empowered to receive deposits, and shortly certificates therefor were in circulation, but never in large volume.

It occurred to Smith that some such certificate device might be adopted to furnish the circulating medium for a vast banking business. So in 1839 he obtained from the territorial government of Wisconsin a charter for the Wisconsin Marine and Fire Insurance Company with the self-same provisions as those of the Chicago Company. The principal function of the former was to supply a circulation, first for Strachan and Scott and then for his own private banking house in Chicago. Thus one finds the earliest certificate of the Wisconsin Marine and Fire Insurance Company dated August 5, 1839, and setting forth "that Strachan and Scott have deposited with this Institution three dollars which will be paid on demand to their order hereon." This certificate is in the possession of the Chicago Historical Society. Smith was convinced that the law might be circumvented by this type of note issue as it had all the appearances of bona fide certificates of deposit. Thereupon he decided to open his own banking house in Chicago and arranged with Strachan and Scott that they move to New York. So within a year by strategic manoeuvering he had organized a company in Milwaukee chiefly for purposes of a circulating medium; had placed in charge Alexander Mitchell who subsequently became Wisconsin's outstanding banker; had established as eastern correspondents men of his own choosing and whom he knew intimately; and finally had laid

the plans for his own bank in Chicago, from which he was to direct his far-flung enterprise. There is but little wonder that he was regarded as a "shrewd financier and enterprising man."

A number of students of banking, notably Horace White, have from time to time pointed out the apparent similarity of "George Smith's money" and modern deposit currency. The parallel, however, does not bear close scrutiny. The vast majority of the certificates of Smith's Wisconsin Marine and Fire Insurance Company indicated on their face that E. I. Tinkham had deposited such and such an amount (one dollar and upwards according to the denomination) which would be paid on demand to bearer. Tinkham was cashier of George Smith and Company, Smith's banking house in Chicago. He was, therefore, not a depositor-customer of the insurance company; indeed, he was not a depositor in any capacity. The "certificates" arose simply through a bookkeeping device. The "deposit" aspect of the obligations made them appear to be performing a function which was sanctioned in the charter provisions of the latter company, but as a matter of fact this was a sheer subterfuge. The true significance of the obligations did not lie in the first part of the phrase inscribed on their face, but rather in the latter part, namely, "will be paid on demand to bearer." They were bona fide notes of a banker and to regard them as certificates of deposit is to confuse both the nature of their origin and their content. It is rather to the certificates of the Chicago Marine and Fire Insurance Company that one must go to find an early counterpart of modern deposit currency; here each bill certificated that a bona fide depositor had made a deposit and, in the absence of actual bank notes and with a poorly developed checking system, they circulated from hand to hand.

"Smith's money" was a great factor in his prosperity, and it served the community preëminently well, being a circulation with practically complete elasticity. An enormous volume of high grade banking business fell to the hands of Smith. He viewed at close hand the first transformation in Chicago as a market place with the opening of the Illinois and Michigan Canal in 1848, and the second, throughout the closely succeeding years, with the building of the railroads into the hinterland and eastward. Now a vast domain was made tributary to Chicago. Over canal, railroad, and turnpike grain was brought to the lake port in steadily increasing volume. The commerce of the Upper Mississippi Valley was now diverted from the river course southward to the routes to Chicago and thence

to the consuming eastern markets via the lakes. A large part of this commerce Smith financed.

Shipments of grain from farmers' elevators to the city were usually financed by the country banker, who, however, by the 1860's was coming increasingly to rediscount his paper at Chicago banks. But the city commission merchants always financed their shipments to the East by selling their drafts to the local bankers. This was the paper that Smith bought and in return for it issued his "certificates." He also loaned on warehouse receipts which were a common security from the very beginning of Chicago banking. Thus it was through the process of discounting business paper that "Smith's money" was put into circulation, and through the receiving of deposits and the selling of eastern exchange it reached Smith's banking office again, having made its rounds as a medium of exchange in the community.

These "certificates" reached their peak in 1852 when they amounted to approximately one and one-half millions. It was in that year that the Wisconsin general banking law was passed and in 1853 Smith and Mitchell took a charter converting the Wisconsin Marine and Fire Insurance Company into a bank under the terms of the new act. This put an end to "Smith's money" and hence to the ceaseless criticism which had been made from the first day of its issue.

But Smith's next move was just as bold as his first; in 1853 he acquired the Atlanta Bank in Georgia and shortly nearly three millions of its notes were supplying his Chicago office with a circulation. Before long he had purchased the Interior Bank of the State of Georgia at Griffin. With the first appearance of these new issues there came renewed attacks upon the banker and also new praise. Now and then came the complaints of "the one man power" and the "money lord," and more often than not his notes were alluded to as "Red Dog stuff from Georgia." But the undeniable fact was that they were accepted without question. Like his Wisconsin "certificates" they were always redeemable. Within a few years, however, the Georgia bank notes were practically all retired; by the latter part of the 1850's deposit currency (demand accounts subject to check) were rapidly taking the place of note issues. Had it not been for this change in the form of bank credit one can only guess what his next move would have been to put himself in possession of a circulating medium.

Throughout, Smith seemed to time his actions with great precision and foresight; no less accurately was his retirement timed.

He decided to give up his business in Chicago at the peak of his success. In 1860 he liquidated his affairs and moved to London where he lived until his death in 1899, and where for years he was known as "Chicago Smith."

Here was a banker who never knew what it was to be free from criticism in the local press, who never, as far as his circulating medium was concerned, operated quite within the legal framework of his day. But he knew the principles of sound commercial banking, and he never departed from them. All in all, he remains to this day as the greatest figure in Chicago's banking history.

Of a different type was J. Young Scammon. He settled in Chicago in 1835, a young man of 23 at just about the same time and at the same age that George Smith first came to the new town. He had had legal training and was shortly admitted to the Illinois bar. In 1837, a year after the Chicago branch of the State Bank had opened its doors, he was appointed attorney for the local office; this position he held for several years, and it gave him an insight into the banking business. He observed closely the operations of the branch bank which was a part of a legally constituted State financial institution, on the one hand, and, on the other, the rapidly expanding business of George Smith and Company. And he saw the former collapse in 1843 and the other become a preëminently successful business. The one legally sanctioned, with operations fully prescribed, failed; the other, never legally authorized with a circulation always outside the law but in extraordinarily capable hands, succeeded.

Scammon had an ambition to become a banker as well as a lawyer. Opportunity appeared to present itself in 1849 when he resurrected the Chicago Marine and Fire Insurance Company which for several years had lain dormant. Straightway he notified the public that it was not the intention of the company "to issue bills or any other circulation;" its banking functions were to be confined "to receiving money on deposit and loaning it and the capital of the institution." Moreover, it was to carry on "a savings department under such guarantee as will make it undoubtedly safe to depositors." It was provided that "all sums of money as shall be deposited in the savings department . . . shall be held in trust . . . and shall not be mingled with the general funds of the institution but kept, used and invested . . . as a distinct fund, the principal thereof belonging in equity to such depositors respectively . . . ." This was the first such device adopted by a Chicago bank to protect

savings depositors and represents what we today call segregation of assets. Scammon was much impressed with this plan because twelve years later when an amendatory act was passed providing for a successor—The Marine Company—the precise wording of the early announcement was incorporated in the new statute. But with such emphasis on savings banking and with no circulation Scammon could not have hoped to compete with Smith in the field of commercial banking. The company had a capital stock of not quite $90,000.

A second opportunity came in 1851 with the passage of the Illinois General Banking Act which for the first time legalized banking as a private enterprise. Scammon quickly availed himself of the new law, took out a charter for the Marine Bank, and before long had notes outstanding of $200,000 which supplied his Chicago Insurance Company with a much needed circulation. Unfortunately the Act was defective, particularly in the provisions covering the securities to be pledged for outstanding notes, and most of the banks chartered under it liquidated within a few years. The Marine Bank, however, of all the chartered institutions had the longest life, existing until 1866. It is to be observed that from 1849 to 1852 Scammon had no circulation whatever; during this period Smith's note issues ranged from $500,000 to in excess of $1,500,000. The former's issues reached their maximum in 1854 when they amounted to $200,000, at which time Smith's circulation was probably as much as $2,800,000, all but $50,000 of which was of extra-legal nature. (In 1852 Smith organized the Bank of America under the terms of the General Banking Law and put out $50,000 in legally secured notes; in 1857, however, he abandoned the charter). By 1858 Scammon's notes had declined to $29,500 and Smith's amounted to $350,000.

Scammon was not at all pleased with the local banking situation, and inasmuch as the law of 1851 seemed doomed from the outset he sought other means to curb the illegal note issues of Smith. So we find him instrumental in the enactment of the Statute of 1853. But this Act proved to be totally ineffective; Scammon himself said that it prohibited only "the circulation of anything as money in this state which was not unconditionally convertible into money, gold or silver, on demand, at the bank where payable." Smith's currency was unconditionally convertible. Meanwhile Smith was amassing a fortune in the banking business, and Scammon with his Chicago Marine and Fire Insurance Company and the Marine Bank was doing tolerably well. The former institution in 1863 became the

Marine Company. And not content with these he opened a private banking office at least as early as 1862. Cramped as the Marine Bank was for a circulation, by the middle of the 1850's it was second only to Smith's bank in the volume of business done. The local *Democratic Press* in 1855 pointed out that a single business house had "drawn checks . . . on the Marine Bank . . . within the last eighteen days for over $1,200,000." Gradually deposit currency was displacing note issue as a form of bank credit, and this at length saved Scammon from resorting to an illegal circulation even if he had ever considered it. On the eve of the panic of 1857 he was doing a considerabel portion of the community's banking business.

With the passage of the National Bank Act a new means was at hand for a note issue, and Scammon in 1864 turned to the organization of the Mechanics National Bank. We read in July of that year: "The stockholders of the Mechanics' Bank at Hardin, Illinois, and their associates, having organized the Mechanics' National Bank of Chicago, will take the office in the Marine Bank Building . . . and thereafter the bills of the said bank will be redeemed at said office at par." The Hardin Bank had been acquired by Scammon in 1861, having been founded under the free banking law of 1851. He became president of the new institution, which was the sixth national bank organized in Chicago. It grew rather slowly; by 1870 its outstanding capital was $250,000, and with total assets of less than 1½ millions it ranked ninth among the nationals.

With the establishment of the Mechanics' Bank, Scammon did not abandon the Marine Company but retained his controlling interest in both; and this in spite of the fact that serious difficulties from time to time had arisen with his state-chartered bank. For example, in 1863 the Supreme Court of Illinois decided that the Marine Bank became liable for the deposit liability of the Chicago Marine and Fire Insurance Company which had suspended in 1861, but which was shortly revived with new capital.

Scammon was enjoying a profitable business when the panic of 1857 struck. It is likely that the crisis could have been met successfully had he not left for a sojourn abroad but a short time before. He was absent for several years; the Company was badly weakened and he returned to find it on the verge of suspension. But he recouped his fortunes and re-established himself as a banker. In 1864, still advocating a strictly legal basis for banking and currency, he framed a resolution which was adopted by the Chicago Board of Trade to the effect that its members "keep no account with any banker . . . except in legal tender treasury notes or their equivalent."

The decade of the 1860's was on the whole prosperous. Then came two disastrous events—the fire of 1871 and the financial panic of two years later. These with property losses and decline in values largely wiped out his private fortune and desperately weakened his national bank. Deposits had been reduced by 90 per cent during the two years following October, 1872, representing a far greater loss than that sustained by any other national bank in the city except two that had already failed. The year 1874 saw the downfall of both the Marine Company and the Mechanics' National; Scammon early in the year had relinquished control of the latter but clung to his company, the predecessor of which he had resurrected a quarter of a century before, until the structure toppled. He never recovered financially and most of the remaining years of his life (he died in 1890) were devoted to extricating himself as best as he could from his business difficulties.

Three things militated against a successful banking career for Scammon:

(1) Early in the 1850's when he might have built a banking business comparable to that of Smith's he steadfastly refused to put out a circulation contrary to the intent of the State Constitution, and without some such note issue it was virtually impossible to carry on commercial banking operations.

(2) His interests as a public-spirited citizen were multitudinous; he always found it necessary to delegate a large portion of his business responsibilities.

(3) His ultimate undoing was due to catastrophes outside his control in fire and panic.

It was the irony of fate that Smith prospered as he successfully overcame laws which for him were essentially unsound, while Scammon, who for thirty years championed a legal structure for banking, and who, with peaks and valleys in his banking career, finally collapsed within the framework which he had striven to create.

Don M. Dailey.

University of Chicago.

Secretary's Column

Since the publication of the last *Bulletin* the Society has received and gratefully acknowledges the following acquisitions:

From Miss Cornelia Duren, Oakland, California: a deed, Loammi Russell to Abraham Duren, dated Feb. 26, 1810; two quit claim deeds, Jesse Russell to Abraham Duren, dated respectively April 27, 1807, and Feb. 5, 1808; two tax bills, Abraham Duren, 1815; some facts relating to the Durens and Russells.

From Mr. Edward R. Farrar, South Lincoln, Massachusetts: Geo. P. Geer, *Geer's Express Directory and Railway Forwarder's Guide,* vol. i, containing the New England States (Springfield, 1858); A. G. Menocal, Civil Engineer, U. S. N., *Report of the U. S. Nicaragua Surveying Party, 1885* (Washington, 1886); M. A. Healy, Capt., U. S. R. M., *Report of the Cruise of the Revenue Marine Steamer CORWIN in the Arctic Ocean in the Year 1885* (Washington, 1887); Hub Publishing Co., *The Hub* (American carriage and wagon makers' trade journal), vols. xviii and xix (1876-77 and 1877-78); Philip Hichborn, Naval Constructor, U. S. Navy, *Report on European Dock-Yards* (Washington, 1889).

From Mr. Seth T. Gano, Boston: Frederick W. Saward and others, *Saward's Annual, A Standard Statistical Review of the Coal Trade,* for the years 1924, 1925, 1926, 1930, and 1931 (New York).

From International Correspondence Schools, Scranton, Pennsylvania: I. C. S. Reference Library, *Retail Advertising* (Parts 1-7), 1903 vol. 18; *Retail Advertising,* (Parts 8-13), 1903, 1904, 1905, vol. 19; *The Profession of Salesmanship; Methods of Marketing; Health and Appearance; Self-Study and Development; Study of the Customer; Successful Reasoning; Study of Goods and Service; The Conducting of Sales; Retail Salesmanship,* 1911 and 1912, vol. 238; *Selling to Dealers; Selling of Specialties; Long-Range Salesmanship; Sales Organization and Management; Credits and Collections; Law That Salesmen Should Know; Correct and Faulty Diction; Selling One's Own Service,* 1912, vol. 239; International Library of Technology, *General Definitions; Copy for Advertisements; Correct and Faulty Diction; Punctuating and Editing; Type and Type Measurements; Layouts; Proof-Reading,* 1909, vol. 60B; *Advertisement Display; Mediums; Retail Management; Department-Store Management,* 1909, vol. 61B; *Single-Entry Bookkeeping; Double-Entry Bookkeeping; Opening, Closing, and Changing Books; Corporation Organization and Bookkeeping; Elements of Cost Accounting; Bank Bookkeeping,* 1904, vol. 59; *Foreign Exchange; Money and Currency; Canadian Banking,* 1907, vol. 99; *Railroad Agency Accounting; Railroad General Office Accounting,* 1913 and 1914, vol. 128; *Corporation Organization and Accounting; Partnerships; Auditing,* 1914, vol. 132; *Cost Accounting* (Parts 1-8), 1913; (Parts 9, 10, 11), 1920, vol. 253.

From Professor John Ise, University of Kansas, Lawrence, Kansas: *Prices Current, Wilmington, N. C.,* May 24, 1854; Sketch of Sales by Slade, Gammill & Pratt, Phila., Oct. 18, 1852; Sketch of Sales by Turnbull, Slade & Co., May 21, 1857. Both Sketches of Sale for account of Ballard Vale Co.

From Mrs. William Henry Trotter, Philadelphia: account and letter books of William Tottter as follows: List of Freight, 15 Nov. 1796 to 12 Mar. 1806;

Waste Book, 8 May 1797 to 6 July 1805; Letter Book, 18 Feb. 1799 to 24 Mar. 1804 (on reverse side of book 2 pages of invoices, 21 Aug. to 12 Sept. 1826); Letter Book, 6 Dec. 1802 to 11 Mar. 1807 (on reverse side of book, Adventures on ships to China, Batavia, &c., 8 May 1797 to 16 Feb. 1803); Letter Book, 17 Mar. 1807 to 15 Nov. 1810; Invoice Book, 29 January 1805 to 29 October 1812; Bills of Exchange, 1803-1822; book containing factory expenses at Canton, Ship *Pigou,* July 26 to Nov. 11, 1796; Index to a ledger 'dated probably around 1800"; Bills and Estimate Book of Thomas Conarroe (either an uncle or cousin of William Trotter), 24 April 1805 to 22 July 1812; Blotter, "almost entirely lumber deals, probably with Thomas Conarroe," 16 Mar. 1809 to 20 Jan. 1813; a 4-page document dated Phila., Sept. 6, 1839, signed by the subscribers and creditors of Conarroe & Dixon; a book labelled "Paupers", 1810-1818; William Trotter's "Guardian of the Poor" book, 1811; a book, "Paupers, apportioned part of district from Sixty to Ninth, and from Vine to Arch Streets," 1811-1812; package of letters tagged "Guardians of the Poor," William Trotter; a mortgage, Sugar Loaf Coal Company to Joseph Trotter, 17 Jan. 1840; bond and warrant, Sugar Loaf Coal Company to Joseph Trotter, 17 Jan. 1840; deed, Nathan Hilles & Wife to the Buck Mountain Coal Company, Dec. 1, 1874; letter, Sept. 8, 1885, to President Buck Mountain Coal Company, from Eckley B. Coxe; letter, Sept. 22, 1885, to William Spencer, Esq., Buck Mountain, Pa., from Eckley B. Coxe; brief of title to the three lots of ground . . . 105 feet front extending to the Delaware River, 1671-1838; typewritten family tree of the "Forebears of William Trotter and Nathan Trotter, Founders of the Trotter Business in Philadelphia"; six sheets of notes on William Trotter, Nathan Trotter, the Sansoms, "backers and starters of William Trotter," and the Buck Mountain Coal Company; a book containing miscellaneous matter,—"Vocabularly of the Terms Used in Bookkeeping," poems, etc. J. S. Skinner & Son, Editors, *The Plough, the Loom, and the Anvil* (Phila., 1848); *Charter of the Pennsylvania Steamship Company* (Phila., 1851); *Crescent Iron Manufacturing Company, Wheeling, Va.* (Boston, 1855); Mary Kirk Spence, *William Penn: A Bibliography* (Harrisburg, 1932); *Constitution of the Young Man's Institute* (Phila., 1850).

From Great Western Railway Company, London, England: *Report of the Directors and Financial Accounts and Statistical Returns for the Year Ended 31st December 1936.*

From Industrie—und Handelskammar, Bremen, Germany: *Bericht der Industrieund Handelskammer Bremer über das jahr 1936.*

From Reichs-Kredit-Gesellschaft Aktiengesellschaft, Berlin, Germany: *Deutschlands Wirtschaftliche Lage an der Jahreswende 1936/37; Geschaftsbericht über das Geschäftsjahr 1936.*

From Bureau Central de Statistique des Pays-Bas, La Haye, Netherlands: *Handelsverkeer van Nederland in 1936.*

From Census and Statistics Office, Wellington, New Zealand: *Statistical Report on Trade and Shipping of the Dominion of New Zealand, 1935,* part II; *Statistical Report on the Agricultural and Pastoral Production of the Dominion of New Zealand for the Season 1935-36.*

From Den Norske Creditbank, Oslo, Norway: Annual report and balance sheet for 1936, two copies in Norwegian, two summaries in English.

NOTE: Owing to lack of space, mention of a number of acquisitions must be postponed till the next issue of the BULLETIN.